







#### Ostial stenting under vision

Dr Muhammad Fayaz khan

#### Introduction

This innovation takes care of the blind spots by incorporating AI assisted intravascular ultrasound technology in the stent delivery system to guide the operator while treating ostial lesions, to ascertain the exact location of the ostium, to achieve the best possible results with confidence and comfort in these highly complex and high-risk procedures where high precision matters the most.

### Gaps in Ostial Treatment

#### Unmet needs of ostial stenting

Inherent limitations of 2D X-ray imaging and variation in ostial location and angulation of the coronaries, pose many challenges, and prone to many errors, leading to major complications in some of these patients. Conventional ostial stenting either misses the ostium OR protrudes too much out causing overhang, which has many detrimental effects on the patient's outcome, especially if they were to come back for reintervention

#### Value

Incorporation of ultrasound into the stent delivery system for accurate and precise stenting where millimeters matters.

#### Unique Benefits:

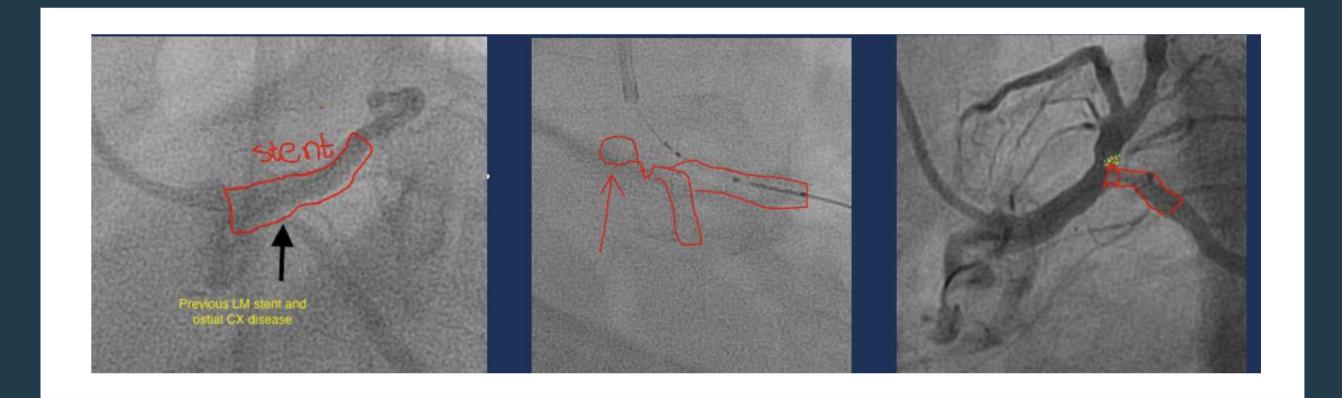
- 1.Optimal Ostial Coverage
- 2. No overhang or missing the ostium
- 3.No shooting in the dark. Treat with confidence and comfort under direct vision
- 4.Unlike co-registration, there is no restriction of views or offline imaging analysis.
- 5.Deployment under live imaging.
- 6.Better patient outcomes and care

#### Deployment

Radio-opaque markers help with the relative position of the stent and ostium; furthermore, guided by intravascular ultrasound, when optimal position is confirmed, the stent is deployed.

#### Stenting Under vision: Vision Pro

**Description:** Tri-lumen delivery system, balloon expandable or bifunctional stent, with proximal microultrasound with AI assistance to exactly locate the margins of the ostium, in both 2D and 3D model created from ultrasound image.



# 

#### Contact

King Abdullah International Medical Research Center (KAIMRC) Innovation and Entrepreneurship Department

PHONE: +966 (11) 429-4586 Email: innovation@kaimrc.edu.sa

Website: https://kaimrc.ksau-hs.edu.sa/En









## Saudi Arabia

